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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Richard Cerami

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7590

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EXAMINER

TODD, GREGORY G

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,282

Applicant(s)

CERAMI ET AL.

Examiner

Gregory G Todd

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/15/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is a second office action in response to applicant's amendment filed, 05 March 2004, of application filed, with the above serial number, on 01 August 2001 in which claims 1, 8, and 14 have been amended and claims 20-35 have been added. Claims 1-35 are therefore pending in the application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-13, 15-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (hereinafter "Bowman", 6,611,867).

As per Claim 1, Bowman discloses a method for managing; a network element inventory for a video and data network comprising:

self-discovering a physical network inventory using network elements of the video and data network (network inventory management; config. adds / changes / deletes) (at least col. Fig. 30, 15B-1; col. 71 line 57 - col. 72 line 7);

self-discovering a logical network inventory using network elements of the video and data network (capacity available from network inventory) (at least col. 71, lines 22-31; Fig. 28, 15B-1);

providing a planned network inventory of the video and data network (planned network capacity) (at least col. 70, lines 60-65; Fig. 26);

loading the physical network inventory, logical network inventory, and planned network inventory into the network element inventory (network provisioning to include installed configuration with identifiers) (at least col. 71, lines 42-49);

synchronizing the physical network inventory, logical network inventory, and planned network inventory in the network element inventory to determine any differences between the physical network inventory and the logical network inventory with the planned network inventory (reconfiguration of the network) (at least col. 71, lines 1-56; Fig. 16-17; also col. 56, lines 3-67);

receiving a request for a view of the network element inventory (at least col. 58, lines 33-48).

Bowman does not explicitly teach determining the view based on at least one of the synchronized physical network inventory, the synchronized logical network inventory, and planned network inventory, wherein the view is determined based on if any differences between the physical network inventory and the logical network inventory with the planned network inventory are determined. However, the use and advantages for using such a view would have been obvious to one skilled in the art at the time the invention was made as Bowman teaches a presentation manager

presenting such information in a browser to a field technician, for example, for monitoring real time network activity (at least col. 58, lines 33-48; col. 55, lines 1-6), which would at least suggest the claimed "view determination" to one skilled in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the use of viewing the differences in network inventory as Bowman teaches presenting such information in a browser for maintenance and work order purposes and this would allow the maintenance user to determine what work orders to put in, for example (see col. 71 line 57 - col. 72 line 27).

As per Claim 3, 15.

wherein the video and data network comprises a Digital Subscriber Line (xDSL) network (at least Fig. 51; col. 20 lines 40-50).

As per Claim 4, 16, 21, and 30.

wherein the planned network inventory comprises planned virtual network inventory (planned logical network configuration) (at least col. 70, lines 60-65).

As per Claim 5, 17, 22, and 31.

wherein the planned network inventory comprises planned physical network inventory (planned network capacity) (at least col. 70, lines 60-65).

As per Claim 6, 18.

wherein synchronizing the physical network inventory, logical network inventory, and planned network inventory comprises comparing the planned network inventory with the self-discovered physical and logical network inventory (comparing level of service) (at least col. 56, lines 3-67, especially lines 45-67).

As per Claim 7, 19.

further comprising creating a repair ticket if the comparison of the planned network inventory with the self-discovered physical and logical network inventory is not substantially equal (alarm creating ticket) (at least col. 55, lines 15-25, 41-49; col. 56, lines 17-28).

As per Claim 8, Bowman discloses a method for managing a network element inventory between one or more operation systems for a video and data network comprising:

self-discovering a physical network inventory using network elements of the video and data network (network inventory management; config. adds / changes / deletes) (at least col. Fig. 30; col. 71 line 57 - col. 72 line 7);

self-discovering a logical network inventory using network elements of the video and data network (capacity available from network inventory) (at least col. 71, lines 22-31; Fig. 28);

providing a planned network inventory of the video and data network (planned network capacity) (at least col. 70, lines 60-65; Fig. 26);

loading the physical network inventory, logical network inventory, and planned network inventory into the network element inventory (network provisioning to include installed configuration with identifiers) (at least col. 71, lines 42-49);

synchronizing the physical network inventory, logical network inventory, and planned network inventory in the network element inventory to determine any differences between the physical network inventory and the logical network inventory

with the planned network inventory (reconfiguration of the network) (at least col. 71, lines 1-56; Fig. 16-17; also col. 56, lines 3-67);

providing the one or more views to the one or more operation systems (presenting in browser) (at least col. 58, lines 33-48; col. 55, lines 1-6).

Bowman does not explicitly teach creating one or more views of the network element inventory using at least one of the synchronized physical network inventory, the synchronized logical network inventory, and the planned network inventory for the one or more operation systems, wherein the one or more views are created based on if any differences between the physical network inventory and the logical network inventory with the planned network inventory are determined. However, the use and advantages for using such a view would have been obvious to one skilled in the art at the time the invention was made as Bowman teaches a presentation manager presenting such information in a browser to a field technician, for example, for monitoring real time network activity (at least col. 58, lines 33-48; col. 55, lines 1-6), which would at least suggest the claimed "view creation" to one skilled in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the use of viewing the differences in network inventory as Bowman teaches presenting such information in a browser for maintenance and work order purposes and this would allow the maintenance user to determine what work orders to put in, for example (see col. 71 line 57 - col. 72 line 27).

As per Claim 9.

further comprising receiving an update of self-discovered physical, self discovered logical, and planned inventory (continuously monitored analysis) (at least col. 56, lines 3-9; Fig. 16-17).

As per Claim 10.

further comprising re-synchronizing the physical network inventory, logical network inventory, and planned network inventory in the network element inventory with the update of self-discovered physical, self discovered logical, and planned inventory (continuously monitored analysis) (at least col. 56, lines 3-9; Fig. 16-17).

As per Claim 11.

further comprising creating one or more views of the re-synchronized network element inventory for the one or more operation systems (threshold manager residing on workstation being retrieved) (at least col. 56, lines 3-9; col. 58, lines 33-48; col. 55, lines 1-6).

As per Claim 12.

further comprising providing the one or more views using the re-synchronized physical network inventory, logical network inventory, and planned network inventory (threshold manager residing on workstation and being examined) (at least col. 56, lines 3-9; col. 58, lines 33-48; col. 55, lines 1-6).

As per Claim 13.

wherein the operation systems comprise sales, engineering, and marketing systems (at least col. 55, lines 1-6; col. 14, lines 43-50; Fig. 1C-1, 1E-1).



Claims 20, 23, 28-29, 32 and 34 do not add or define any additional limitations over claims 1 and 8 and therefore are rejected for similar reasons.

As per Claim 24.

further comprising if there are differences between the physical network inventory and the logical network inventory with the planned network inventory, selecting at least one of the physical network inventory, the logical network inventory, and the planned network inventory as a representation of the network element inventory (reconfiguration of the network) (at least col. 71, lines 1-56; Fig. 16-17; also col. 56, lines 3-67).

As per Claim 25.

further comprising if there are differences between the physical network inventory and the logical network inventory with the planned network inventory, determining a representation of the network element inventory from the physical network inventory the logical network inventory, and the planned network inventory (at least col. 58, lines 33-48; col. 55, lines 1-6; col. 71, lines 1-56).

As per Claim 26.

further comprising receiving an update of at least one of the self-discovered physical, self discovered logical, and planned inventory (at least col. 71, lines 1-56).

As per Claim 27.

further comprising comparing an updated physical network inventory or updated logical network inventory with an updated planned network inventory in the network element inventory to determine differences between the updated physical network

inventory and the logical network inventory with the planned network inventory (at least col. 58, lines 33-48; col. 55, lines 1-6; col. 71, lines 1-56).

Claims 33 and 35 do not add or define any additional limitations over claim 24 and therefore are rejected for similar reasons.

4. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman in view of Wetzel (hereinafter "Wetzel", 6,388,990).

Bowman fails to explicitly disclose wherein the video and data network comprises a Very high bit rate Digital Subscriber Line (VDSL) network. Bowman does disclose using next generation networks and xDSL networks (at least Fig. 51; col. 20, lines 19-59). However, using certain xDSL technologies such as VDSL is disclosed by Wetzel (at least col. 2, lines 18-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of VDSL into Bowman's system as Bowman discloses using a next generation network, suggesting higher bandwidth networks, as the medium for communications and as Wetzel discloses VDSL as being a variation of xDSL for future networks.

### ***Response to Arguments***

5. Applicant's arguments filed 05 March 2004 have been fully considered but they are not persuasive.

Applicants argue Bowman does not teach or suggest limitations of claim 1 as amended, including: a) self-discovering a physical or logical network inventory using network elements; and b) synchronizing a physical network inventory, a logical network

inventory, a planned network inventory into the network element inventory to determine any differences between the physical network inventory and the logical network inventory with the planned network inventory.

In response to a); Bowman teaches the network development and planning process and the network inventory management being carried out through servers (network elements) (at least Fig. 15B-1) and is inherent these processes are running on some kind of network elements.

In response to b); Bowman teaches synchronizing in the sense of the word as defined by Applicant in amended claim 1, wherein Bowman teaches determining differences between the physical and logical network inventory and the planned network inventory as Bowman teaches the network provisioning process to include developing new networks and architectures to determine network inventory capabilities to be triggered and subsequently planning the required network capacity (at least col. 71, lines 1-56).

6. Applicant's arguments with respect to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection. Applicants argue Bowman does not teach or suggest c) creating one or more views where differences between the physical network inventory and the logical network inventory with the planned network inventory are used to determine the view.

In response to c); Applicants' amendments to the claims necessitated the new ground of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Newly cited Rustad et al and Bell in addition to previously cited Weber et al, Sundaresan et al, Yim et al, Mukaiyama et al, Bhagavath et al, McGhee, and Aravamudan are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

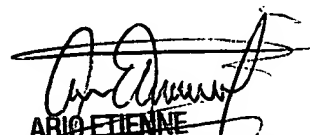
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd



Patent Examiner

Technology Center 2100



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